

IN THE CLAIMS

Please amend the claims as follows:

1-51. (Cancelled)

52. (NEW) A computerized method comprising:

presenting a group of predefined semiconductor element features in a feature diagram of a user interface, each feature having a corresponding feature model;

receiving, at the user interface, a selection of one or more features in the feature diagram to be included in or excluded from a semiconductor element;

manipulating a statechart as a function of the one or more features to provide a revised statechart; and

generating, as a function of the revised statechart, computer executable code, which when executed, causes semiconductor fabrication equipment to fabricate a semiconductor element including the selection.

53. (NEW) The computerized method of claim 52, wherein a first predefined feature of the group of predefined features includes a feature model requiring inclusion of a second predefined feature, and wherein selection of the first predefined feature causes the second predefined feature to be included in the revised statechart.

54. (NEW) The computerized method of claim 52, wherein a first predefined feature of the group of predefined features excludes inclusion of a second predefined feature, and wherein selection of the first predefined feature prevents the second predefined feature from being included in the revised statechart.

55. (NEW) The computerized method of claim 52, wherein one or more predefined features of the group of predefined features are designated as default features in their respective feature models, and wherein manipulation of the statechart as a function of the one or more features will cause the default features to be included in the revised statechart unless the default features are selected to be excluded.

56. (NEW) The computerized method of claim 52, further comprising:
 deploying the computer executable code to a controller coupled to the semiconductor fabrication equipment; and
 issuing a command to start execution of the computer executable code within the controller.